negligible. Using the ordinary Westergren technique the time spent on each specimen after it reaches the laboratory is roughly 2 minutes, and two people can deal with 30 to 40 specimens. In estimating the maximum velocity of sedimentation one worker cannot watch more than 10 tubes, and during the 2 hours of observation he has no time to settle to any other work. Even one tube will take this time.

If the gain in accuracy over the single-reading method were striking one would have to consider adopting the M.V. method. But in a series of 350 specimens in which the second-hour reading was plotted against M.V. the correlation was very good up to M.V. 60 mm./100 minutes, and sufficiently good up to 80 mm./100 minutes. Thereafter the scatter on the graph increased, but the degree of illness of the few cases represented made slight discrepancies unimportant. The correlation between first-hour reading and M.V. is not quite so good. The Day sedimentin index, which is the log of the M.V., exaggerates small variations in the lower range of E.S.R. This is deceptive, as small day-to-day variations occur in normal subjects.

Della Vida and many other writers on blood sedimentation hold the view that temperature variations in the laboratory do not cause significant variations in E.S.R. However, a series of duplicate tests carried out last winter, when the temperature of the laboratory was from 7° F. to 10° F. below the temperature of the constant temperature chamber in which the test is always carried out at the Cheshire Joint Sanatorium, gave results in the cool specimens 10% to 20% lower than in the temperature-controlled specimens. Contrary to Day's findings, this variation was present in the M.V. as well as in the second-hour readings. This discrepancy in winter is considerably greater than the discrepancy between M.V. and second-hour reading under temperature-controlled conditions.—I am, etc.,

Market Drayton. A. CLARK PENMAN.

Carotinaemia

SIR,—The article on carotinaemia by Drs. S. Almond and R. F. L. Logan (Aug. 29, p. 239) raises certain questions with regard to the metabolism of carotene. First, with regard to the transfer of carotene from mother to infant, I have confirmed—in collaboration with Dr. A. Hart (maternity department)—the findings of Menken (*Maandschr. Kindergeneesk.*, 1934, **4**, 22), Wendt (*Klin. Wschr.*, 1935, **1**, 9), Gaehtgens (ibid., 1937, **1**, 894), and Willstaedt and With (*Z. Vitaminf.*, 1939, **9**, 212) that the serum carotene in the newborn is very much lower than that of the mother (6% to 24%), although we found the vitamin A to be about equally high in both; the latter observation is in contrast with the results of those authors—except Menken (1934)—who found only traces of vitamin A in the infant's blood. In the case referred to in the article practically all the carotene must have been transferred to the infant through the breast milk. Secondly, the length of time required for pigmentation was in my experiments 20 and 16 days in the cases of one female and one male who ate 1 lb. of cooked or grated steamed carrots (with about 3% margarine) per day; the pigmentation of the face and the hands started to fade after a few days, but it persisted in the skin of the fingers for more than 16 days after carrots had been discontinued. The sclera did not show any discoloration. In three other subjects the average daily intake of 1/2 lb. of cooked carrots or the corresponding amount of spinach did not result in pigmentation after 14, 63, and 80 days. The concentrations of carotenoids in serum were in the first two cases, when pigmentation appeared, 360 and 470 γ per 100 ml. serum, while in the other three cases the level did not rise above 150 and 180 γ per 100 ml.—I am, etc.,

London Hospital, E.1. H. HOCH.

V.D. in the Forces

SIR,—In the Army considerable numbers of men are being incapacitated through venereal infection. In many cases the women who have spread the disease are known, and in some cases lists of these women have been drawn up. At the present time no effective action can be taken in inducing suspected persons to be examined, and, if necessary, treated. Under recent regulations M.O.H.s have certain powers with regard to lice-infested persons, etc. Would it not be possible for similar powers to be given in the much more serious venereal diseases? Suspected persons could be asked to go to be examined at venereal disease clinics, or to be examined by specialists privately (to be paid for under the National Venereal Disease Service), and failure to do this would involve their being kept in an infectious diseases hospital, for the purpose of isolation.—I am, etc.,

Stonehaven, Kincardineshire. H. GRANT MCPHERSON.

Operations and Workmen's Compensation

SIR,—Mr. Harold Gardiner (Aug. 29, p. 265) questions my contention as to the pitfalls which await the partially disabled worker when he is offered "light work." Perhaps he may be advised to read the *Proceedings* of the Royal Society of Medicine, May, 1942, where Mr. H. E. Griffiths, the famous surgeon and one of the pioneers of rehabilitation in this country, writes under the heading of "The Plague of Light Work": "Under the provisions of the Light Work Clauses in the Workmen's Compensation Acts before and after 1931, the employer may reduce the amount of weekly payment of compensation to the workman if he can show that the workman is fit to undertake light work and if light work is available. When the Light Work Clause first became law it was thought, or perhaps hoped, that light work would help to rehabilitate the patient. The evidence given by the British Medical Association before the Royal Commission on Workmen's Compensation has abundantly proved the opposite, and the reasons are not far to seek." Mr. Griffiths then explains: "In the majority of trades in which accidents occur there is no real light work and jobs are made by the employer for the workman at the instigation of the insurers." Is Mr. Griffiths, in the eyes of Mr. Gardiner, as "biased" as he thinks I am?

As to the other comments which Mr. Gardiner makes, I can only say that he considers too much the theoretical surface rather than the actual working of industrial accident insurance. Whether the employer's doctor is led by other than purely medical motives or not, he will always remain under the suspicion of bias on the part of the disabled. The necessity for creating medical authorities in these matters which are beyond any such suspicion is widely recognized. It is to be hoped that any new workmen's compensation law will embody the point, which of course requires fundamental organizational and administrative changes. If Mr. Gardiner thinks the present law makes it easy for the partially disabled person to claim compensation for total incapacity if he does not find a job, he does not seem to be aware that the workman must in all cases prove that he had taken *all* "reasonable" steps to get employment, a requirement which is not always easy to fulfil to the satisfaction of county courts. This makes the matter far more difficult for the worker (cf. Evidence of the Mineworkers Federation, Royal Commission on Workmen's Compensation, pp. 642 and 771). Moreover, the partially disabled worker must satisfy the county court judge that the employer who has refused to employ him has done so wholly or mainly because of the injury. As to the supply of appliances—the *Final Report on Rehabilitation*, 1939, pp. 132 and 133, states: "A considerable proportion of the cost of special appliances is, we are informed, borne by the patients themselves." The Memorandum of the T.U.C. to the Royal Commission on Workmen's Compensation stated (p. 425 of Evidence) that the omission of the workmen's compensation law to make the supply of appliances a statutory obligation had not been mitigated "to any appreciable extent" by the action of employers and their insurers.

Then comes the difficulty when a second or third employer considers employing a previously injured person. Whether he or the first employer will be liable if a second injury occurs or a recrudescence sets in, he will be anxious not to employ such men in order to avoid costly and annoying litigation. In a case which came before the Court of Appeal on June 27, 1941, it was stated by MacKinnon, L.J., that "although the county court judge found that the workman has physically recovered from his accident, yet the workman was unable to get work by reason of a disinclination on the part of the employers of that class to give him work because of the fact that he had previously had this accident, either because they thought that he was the sort of man who was inclined to have

accidents or because they doubted whether the verdict of the doctors in saying he had recovered was really justified and suspected that he had not really recovered." Perhaps Mr. Gardiner will recognize that so long as such things happen one needs no particular "bias" to support very radical changes in the present workmen's compensation law, not only the reform of "weak points."—I am, etc.,

Richmond, Surrey. HERMANN LEVY.

The Demand on the Blood Donor

SIR,—With reference to the leading article on the above subject in your issue of Sept. 19, it should be known that, as a routine, since the outbreak of war, all donors to the Army Blood Transfusion Service have been issued, at the time of donation, with a seven-day supply of ferrous sulphate tablets, equivalent to 200 mg. of Fe a day.—I am, etc.,

L. E. H. WHITBY,
Brigadier,
Consulting Physician in Transfusion and Resuscitation to the Army.

Obituary

HEDLEY DUNCAN WRIGHT, M.D., D.Sc.

We regret to announce the death on September 9 at Mossley Hill of Prof. Hedley Duncan Wright, who had held since 1934 the post of city bacteriologist to the Liverpool Corporation and the chair of bacteriology at the University of Liverpool.

The son of Robert Stuart Wright, he was born at Ulverstone, Tasmania, on March 3, 1891, and studied at the University of Tasmania, graduating B.A. in 1910. His medical course was taken at the University of Edinburgh, where he obtained the M.B., Ch.B. degrees (with first-class honours) in 1916, the M.D. (with gold medal) in 1925, and the D.Sc. in 1927. He served with the R.A.M.C. during the last war in France, India, and Persia, and then returned to Edinburgh on his appointment as lecturer in bacteriology in the University, assistant director of the Research Laboratory of the Royal College of Physicians, and Lister Research Fellow. In 1923 he came to London to take up the post of lecturer in bacteriology at University College Hospital Medical School, and five years later the University of London appointed him Reader in Bacteriology at U.C.H. In 1930 he was elected to the chair of bacteriology at Sydney University, but returned to this country from Australia four years later to succeed Prof. J. M. Beattie at Liverpool.

Prof. Hedley Wright was for some time assistant editor of the *Journal of Pathology and Bacteriology* and published papers independently and jointly in that journal, in the *Biochemical Journal*, and in the *Edinburgh Medical Journal*. At the Annual Meeting of the British Medical Association in 1927 he was vice-president of the Section of Pathology and Bacteriology.

The death took place at Bournemouth on September 3 of HENRY DOBREE WOODROFFE, M.D., lately of Swanage, who in his time did excellent work for the British Medical Association, which he joined thirty years ago. Dr. Woodroffe, who was a student of Trinity College, Dublin, qualified in 1907. For a number of years he had practised in the small town of Woodstock in Oxfordshire, and while there he was an active member of the Oxford Division of the B.M.A., its chairman in 1933-4, and afterwards its vice-chairman. As a member of the Arrangements Committee and in other ways he took a prominent part in the organization of the Oxford Meeting of the Association in 1936, and not a little of the success of that assembly was due to his great energy and his unusual degree of personal charm. Previously Dr. Woodroffe had practised in East Anglia—he was a representative of the very best type of country doctor—and was honorary secretary for three and a half years of the East Norfolk Division. It was as a representative of that Division that he was introduced to the central affairs of the Association, and for many years from 1924 onwards he was a familiar figure and a not infrequent speaker at the Annual Representative Meeting and the Annual Panel Conference. From 1931 to 1936 he served on the old Medico-Political Committee (now the General Practice Committee), and did good work, especially on the subcommittee which looked after the interests of ship surgeons. He was also interested in insurance practice, and for a time was chairman of the Panel Committee for the county of Oxford. Another of his interests was the British Red Cross Society, and he was a director of its organization in his locality. During the last war he served as temporary captain, R.A.M.C. While living latterly in Dorset he had acted as honorary surgeon to Swanage Cottage Hospital.

We regret to announce the sudden death at Preston, Lancs, of Dr. GEORGE GORDON JOHNSTONE. He was born in 1887 at Ilkley, Yorkshire, the elder son of the late Thomas Johnstone, M.D., M.R.C.P. From Marlborough College, and a year at Edinburgh University, he became an exhibitioner at King's College, Cambridge, obtaining a 1st Class in Part I of the Natural Sciences Tripos, and a 2nd Class in Part II. From University College Hospital he graduated M.B., B.Ch. in 1912, M.D. in 1919, and took the D.P.H. in 1920. Johnstone served through the whole of the last war as captain, R.A.M.C.(T.F.), in charge of No. 23 Sanitary Section, being twice mentioned in dispatches and awarded the Military Cross. In 1920 he married Miss Constance Margaret Dempster of Perth. After a period as assistant county medical officer for Wiltshire, he became an assistant county medical officer for Lancashire, where he was in active work when he died. Remaining on the Reserve of the T.A. he was sadly disappointed to be classed medically unfit in Sept., 1939. Dr. Johnstone will be remembered for his sincerity, a man known well by too few, his ability and conscientious thoroughness hidden by caution and dislike of prominence. He had the gift of understanding children, among whom was much of his work. By his death the public health service of the Lancashire County Council has lost one of its most able officers. Kindly and sympathetic in manner, he was untiring in his efforts to ensure the welfare of his patients. Dr. Johnstone was a public health worker whose integrity of character and professional attainments gained the high esteem of all his colleagues and friends, and his loss will be severely felt.

Dr. SAMUEL MCCOMB died suddenly at his home in Belfast on Aug. 17. He was 57 years of age and a graduate of Queen's University. In his younger days he was an outstanding athlete. In 1910 he was 100 yards champion of Ulster and Ireland, and was a member of the Cliftonville XI which won the Irish Football Cup in 1909. He served with the R.A.M.C. during the last war and attained the rank of captain. During the present war his time was largely occupied with medical boards apart from an outstanding general practice which was almost a hobby to him. Dr. McComb had a genial and lovable personality which won for him a host of friends in every walk of life, and in the profession he was universally popular. He joined the B.M.A. in 1915 and was elected chairman of the Belfast Division last year. He is survived by his widow, a daughter, and a son who is following his father in athletic achievements and into the medical profession.

The Services

Temp. Surg. Lieut. J. A. Smart, R.N.V.R., has been appointed an M.B.E. (Military Division) for skill and devoted service in the care of wounded after H.M.S. *Hermes* had been sunk by enemy air attacks in the Indian Ocean.

Temp. Surg. Lieut. W. R. D. Seymour, R.N.V.R., has been mentioned in dispatches for bravery and devotion to duty when H.M.S. *Electra* was lost.

Among the awards for gallant and distinguished services in the Middle East during the period Nov., 1941, to April, 1942, approved by the King, is the name of Major (Temp. Lieut.-Col.) Norman Berry, R.A.O.C. Major Berry, who receives the Order of the British Empire, is the only son of Prof. R. J. A. Berry, a member of the B.M.A. Council.

CASUALTIES IN THE MEDICAL SERVICES

Brief obituary notices of Group Capts. HUGH WOLFE CORNER and GERARD JOSEPH HANLY, R.A.F., were published in this column on June 27 (p. 807) and Sept. 5 (p. 298) respectively. We are indebted to Air Marshal Sir Harold Whittingham, Director-General of Medical Services of the Royal Air Force, for the following appreciations of these two officers.

The R.A.F. Medical Service has lost two outstanding officers who joined the Service in 1924, and who served as brother officers in that year at the Central Medical Board, and later at the R.A.F. Officers' Hospital at Finchley, one having a medical bent and the other a surgical bent. They were both extremely keen on aviation, qualified as pilots in due course, and lost their lives flying on active service.